

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A beam irradiation apparatus being characterized in that the beam irradiation apparatus has means for scanning an continuously output energy beam on an irradiated object, the means for scanning has a specular body, the specular body is fixed to a shaft so as to be set on an optical axis of the beam, and the specular body rotates on the shaft as a center.

2. (Original) The beam irradiation apparatus according to claim 1, wherein the continuously output energy beam is emitted from an oscillator.

3. (Original) The beam irradiation apparatus according to claim 1, wherein the specular body has a plane surface or a curved surface.

4. (Original) The beam irradiation apparatus according to claim 1, wherein the beam irradiation apparatus comprises a plurality of said means for scanning.

5. (Original) The beam irradiation apparatus according to claim 1, wherein the shaft has a supporting bar in one end or in both ends thereof.

6. (Original) The beam irradiation apparatus according to claim 1 further comprising means for moving the irradiated object and the beam relatively.

7. (Original) The beam irradiation apparatus according to claim 1, wherein the means for moving has a control apparatus for controlling so as to move in synchronization with scanning of the means for scanning.

8. (Original) The beam irradiation apparatus according to claim 1, wherein the continuously output energy beam is a beam emitted from any one of a YVO₄ laser, a YAG laser, a YLF laser, a YAlO₃ laser, and an Ar laser.

9. (Original) The beam irradiation apparatus according to claim 1 further comprising an optical system for shaping the continuously output energy beam into linear, wherein the optical system is arranged between an oscillator of the beam and the means for scanning.

10. (Original) The beam irradiation apparatus according to claim 1 further comprising an f θ lens arranged between the means for scanning and the irradiated object.

11. (Original) The beam irradiation apparatus according to claim 1 further comprising a telecentric f θ lens between the means for scanning and the irradiated object.

12. (Original) The beam irradiation apparatus according to claim 1, wherein the means for scanning the energy beam on the irradiated object is a galvanometer mirror.

13. (Original) A beam irradiation apparatus being characterized in that the beam irradiation apparatus has means for scanning an continuously output energy beam on an irradiated object, the means for scanning has a plurality of specular bodies, the plurality of specular bodies is fixed to a shaft on an optical axis of the beam so that

side surfaces of the specular bodies do not contact each other, and the plurality of specular bodies rotates on the shaft as its center.

14. (Original) The beam irradiation apparatus according to claim 13, wherein the plurality of specular bodies has a plane surface or a curved surface.

15. (Original) The beam irradiation apparatus according to claim 13, wherein the continuously output energy beam is emitted from an oscillator.

16. (Original) The beam irradiation apparatus according to claim 13, wherein a number of the means for scanning is more than one.

17. (Original) The beam irradiation apparatus according to claim 13 further comprising means for moving the irradiated object and the beam relatively.

18. (Original) The beam irradiation apparatus according to claim 13, wherein the means for moving has a control apparatus for controlling so as to move in synchronization with scanning of the means for scanning.

19. (Original) The beam irradiation apparatus according to claim 13, wherein the continuously output energy beam is a beam emitted from any one of a YVO₄ laser, a YAG laser, a YLF laser, a YAlO₃ laser, and an Ar laser.

20. (Original) The beam irradiation apparatus according to claim 13 further comprising an optical system for shaping the continuously output energy beam into linear, wherein the optical system is arranged between an oscillator of the beam and the means for scanning.

21. (Original) The beam irradiation apparatus according to claim 13 further comprising an f θ lens between the means for scanning and the irradiated object.

22. (Original) The beam irradiation apparatus according to claim 13 further comprising a telecentric f θ lens between the means for scanning and the irradiated object.

23. (Original) The beam irradiation apparatus according to claim 13, wherein the means for scanning the energy beam on the irradiated object is a polygon mirror.

13-48 (Canceled)

49. (New) A beam irradiation apparatus comprising:
a laser oscillator for emitting an energy beam;
a specular body;
a shaft;
a stage; and
a lens between the specular body and the stage on the optical axis of the beam,
wherein the specular body is fixed to a shaft so as to be set on an optical axis of the energy beam, and
wherein the specular body rotates using the shaft as its center.

50. (New) The beam irradiation apparatus according to claim 49,
wherein the energy beam output continuously is emitted from the oscillator.

51. (New) The beam irradiation apparatus according to claim 49,
wherein the specular body has a plane surface or a curved surface.

52. (New) The beam irradiation apparatus according to claim 49,
wherein the shaft has a supporting bar in one end or in opposite ends thereof.

53. (New) The beam irradiation apparatus according to claim 49,
wherein the energy beam and the stage are relatively moved.

54. (New) The beam irradiation apparatus according to claim 49,
wherein the energy beam output continuously is a beam emitted from a laser
selected from the group consisting of a YVO₄ laser, a YAG laser, a YLF laser, a YAlO₃
laser, and an Ar laser.

55. (New) The beam irradiation apparatus according to claim 49, further
comprising:
an optical system for shaping the energy beam output continuously into linear,
wherein the optical system is provided between the oscillator and the specular
body on the optical axis of the beam.

56. (New) The beam irradiation apparatus according to claim 49,
wherein the lens is selected from an f θ lens and a telecentric f θ lens.

57. (New) The beam irradiation apparatus according to claim 49,
wherein the specular body is a galvanometer mirror.

58. (New) A beam irradiation apparatus comprising:
a laser oscillator for emitting an energy beam;
a specular body;
a shaft;
a control apparatus;

a stage; and
a lens between the specular body and the stage on the optical axis of the beam,
wherein the specular body is fixed to a shaft so as to be set on an optical axis of
the energy beam, and
wherein the specular body rotates using the shaft as its center
wherein the rotation of the specular body is controlled by the control apparatus.

59. (New) The beam irradiation apparatus according to claim 58,
wherein the energy beam output continuously is emitted from the oscillator.

60. (New) The beam irradiation apparatus according to claim 58,
wherein the specular body has a plane surface or a curved surface.

61. (New) The beam irradiation apparatus according to claim 58,
wherein the shaft has a supporting bar in one end or in opposite ends thereof.

62. (New) The beam irradiation apparatus according to claim 58,
wherein the energy beam and the stage are relatively moved.

63. (New) The beam irradiation apparatus according to claim 58,
wherein the energy beam output continuously is a beam emitted from a laser
selected from the group consisting of a YVO_4 laser, a YAG laser, a YLF laser, a YAlO_3
laser, and an Ar laser.

64. (New) The beam irradiation apparatus according to claim 58, further
comprising:
an optical system for shaping the energy beam output continuously into linear,

wherein the optical system is provided between the oscillator and the specular body on the optical axis of the beam.

65. (New) The beam irradiation apparatus according to claim 58,
wherein the lens is selected from an $f\theta$ lens and a telecentric $f\theta$ lens.

66. (New) The beam irradiation apparatus according to claim 58,
wherein the specular body is a galvanometer mirror.

67. (New) A beam irradiation apparatus comprising:
a laser oscillator for emitting an energy beam;
a specular body;
a shaft;
a stage; and
wherein the energy beam and the stage are relatively moved,
wherein the specular body is fixed to a shaft so as to be set on an optical axis of
the energy beam, and
wherein the specular body rotates using the shaft as its center.

68. (New) The beam irradiation apparatus according to claim 67,
wherein the energy beam output continuously is emitted from the oscillator.

69. (New) The beam irradiation apparatus according to claim 67,
wherein the specular body has a plane surface or a curved surface.

70. (New) The beam irradiation apparatus according to claim 67,
wherein the shaft has a supporting bar in one end or in opposite ends thereof.

71. (New) The beam irradiation apparatus according to claim 67,
wherein the energy beam output continuously is a beam emitted from a laser
selected from the group consisting of a YVO₄ laser, a YAG laser, a YLF laser, a YAlO₃
laser, and an Ar laser.

72. (New) The beam irradiation apparatus according to claim 67, further
comprising:
an optical system for shaping the energy beam output continuously into linear,
wherein the optical system is provided between the oscillator and the specular
body on the optical axis of the beam.

73. (New) The beam irradiation apparatus according to claim 67,
wherein the lens is selected from an f θ lens and a telecentric f θ lens.

74. (New) The beam irradiation apparatus according to claim 67,
wherein the specular body is a galvanometer mirror.